IN THE CLAIMS:

The following is a listing of the claims in the application with 10 and 13 shown as currently amended.

LISTING OF CLAIMS

Claims 1-9 (Cancelled)

Claim 10. (Currently Amended) An optical disk drive that can write data in an optical disk having a plurality of rotative modes, comprising:

a memory unit disposed in the optical disk drive and configured to store information indicating how a tracking offset value is to be varied corresponding to each of the plurality of rotative modes;

a microcomputer including a test recording unit and an optimum tracking offset determination unit wherein said test recording unit is configured to read particular information from said memory unit indicating how a tracking offset value is to be varied for a given rotative mode in said plurality of rotative modes wherein the test recording unit writes test data in a first plurality of frames of the optical disk using the tracking offset value being varied in accordance with the particular information being read for said given rotative mode, and wherein said

an optimum tracking offset determination unit is configured to determine the optimum tracking offset value based on characteristic values of signals reproduced from respective frames of the first plurality of frames.

Claim 11. (Previously Presented)   The optical disk drive as claimed in claim 10, wherein said test recording unit repeats the writing of test data for a plurality of times with the tracking offset value being varied in accordance with the particular information read from the memory unit; and

said optimum tracking offset determination unit obtains average

characteristic values of respective frames in which the test data is written using the same tracking offset value and determines the optimum tracking offset value of the optical disk drive based on the obtained average characteristic values.

Claim 12. (Previously Presented)   The optical disk drive as claimed in claim 11, wherein said test recording unit repeats the writing of test data for a plurality of times such that the frames in which the test data is written using the same tracking offset value are located at different angular positions of the optical disk.

Claim 13. (Currently Amended) In an optical disk drive having a memory unit in which the optical disk drive that can write data in an optical disk at a plurality of rotative modes, a method of determining an optimum tracking offset value of the optical disk, the method comprising the steps of :

reading information from a said memory unit indicating how a tracking offset value is to be varied for any given rotative mode of a plurality of rotative modes in the optical disk;

writing test data in a first plurality of frames of the optical disk using the tracking offset value being varied in accordance with the information read from the memory unit,

reading the written test data in the first plurality of frames to obtain characteristic values of signals, reproduced from respective frames of the first plurality of frames, and

determining the optimum tracking offset value of the optical disk drive based on the obtained characteristic values.

Claim 14. (Previously Presented) The method as claimed in claim 13, wherein

the step of writing test data is repeated for a plurality of times with the tracking offset value being varied in accordance with the reading information; and

in the step of reading the test data, average characteristic values of respective frames are obtained in which the test data is written based on using the same obtained tracking offset value; and

in the step of determining the optimum tracking offset value, the optimum tracking offset value of the optical disk drive is obtained based on the obtained average characteristic values.

Claim 15. (Previously Presented) The method as claimed in claim 14, wherein the frames in which the test data is written using the same tracking offset value are located at different angular positions of the optical disk.